Claims

1. A synergistic herbicidal mixture comprising

A) a compound selected from the group consisting of imidazolinones, sulfonylureas and sulfonamides, including their respective isomers a s well as their respective environmentally compatible salts or esters or amides or other derivatives;

and

B) at least one herbicidal compound of the group of chloro acetamides, oxyacetamides and tetrazolinones as well as quinmerac including their respective isomers as well as their respective environmentally compatible salts or esters or amides or other derivatives

and, if desired,

C) at least one herbicidal compound selected from the group consisting of clomazone, atrazin, dichlormid, benoxacor, LAB-145138, MG-191, MON-13900, cyometrinil, oxabetrinil, fluxofenim, flurazole, naphtalicacidanhydride, fenchlorim, fenchlorazol, mefenpyr, cloquintocet (including its hydrate(s)), 1-ethyl-4-hydroxy-3-(1*H*-tetrazol-5-yl)-1*H*-quinolin-2-one, 4-carboxymethyl-chroman-4-carboxylic acid, *N*-(2-methoxy-benzoyl)-4-(3-methyl-ureido)-benzenesulfonamide, (3-oxo-isothiochroman-4-ylidenemethoxy)-acetic acid methyl ester including their respective isomers as well as their respective environmentally compatible salts or esters or amides or other derivatives.

2. A synergistic herbicidal mixture as claimed in claim 1 in which component B) are chloro acetamides, including their respective isomers as well as their respective environmentally compatible salts or esters or amides or other derivatives.

3. A synergistic herbicidal mixture as claimed in claims 1 to 2 in which the chloro acetamides, including their respective isomers as well as their respective environmentally compatible salts or esters or amides or other derivatives are selected from the group consisting of metazachlor, metolachlor and dimethenamid.

4. A synergistic herbicidal mixture as claimed in claims 1 to 3 in which the imidazolinone is imazamox including its respective isomers as well as its respective environmentally compatible salts or esters or amides or other derivatives.

5. A synergistic herbicidal mixture as claimed in claims 1 to 4 in which the sulfonyl urea is selected from the group consisting of nicosulfuron, tritosulfuron, mesosulfuron, cyclosulfamuron, rimsulfuron, foramsulfuron including their respective isomers as well as their respective environmentally compatible salts or esters or amides or other derivatives.

6. A synergistic herbicidal mixture as claimed in claims 1 to 4 in which the sulfon amide is selected from the group consisting of florasulam, flumetsulam, metosulam, penoxulam, cloransulam-methyl, diclosulam and N-(5,7-dimethoxy[1,2,4]triazolo [1,5-a]pyrimidin-2-yl)-2-methoxy-4-(trifluoromethyl)-3-pyridinesulfonamide, including their respective isomers as well as their respective environmentally compatible salts or esters or amides or other derivatives.

7. A synergistic herbicidal mixture as claimed in claims 1 to 6 in which the imidazolinone is imazamox including its respective isomers as well as its respective environmentally compatible salts or esters or amides or other derivatives and the chloro acetamides is metazachlor including its respective isomers as well as its respective environmentally compatible salts or esters or amides or other derivatives.

8. A herbicidal composition comprising a herbicidally active amount of a synergistic herbicidal mixture as claimed in any of claims 1 to 7, at least one inert liquid and/or solid carrier and, if desired, at least one further additive.

9. A method of controlling undesired vegetation, which comprises applying a synergistic herbicidal mixture as claimed in any of claims 1 to 7 before, during and/or after the emergence of undesired plants simultaneously or in succession.

10. A method as claimed in claim 9, wherein the crops are tolerant or resistant against the synergistic herbicidal mixture.